SC186 WG2
TIS-B
Progress Report

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Working Group Goals

- **Produce a TIS-B MASPS in 2002**
  - Achieve consensus among airspace users, service providers, regulatory authorities, and equipment manufacturers
  - Achieve consistency with other documents
    - ASA MASPS
    - various link MOPS

- **Support various operational applications**
  - See-and-avoid (airborne + surface) in first version
  - Some others in later version(s)

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MASPS Status

- **A MASPS was distributed in May for ballot**

- **As agreed at the June SC186 Plenary, WG2 will continue work to resolve the non-concur comments**

- **Two new subgroups have initiated work:**
  - **Clarity/ADS-B Compatibility Subgroup**
  - **Ground Integrity Subgroup**

- **We plan to complete the MASPS revisions to enable a re-ballot late in 2002**

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TIS-B Concept

- **Broadcast ground surveillance data to display non-ADS-B targets onboard ADS-B aircraft ("gap-filler")**
  - Also compensates for multi-link environment where population is not compatibly equipped

- **Optional roles, to be defined in future editions:**
  - Full traffic picture: broadcast ADS-B equipped targets to improve their surveillance quality for use in demanding applications
  - Validation of aircraft ADS-B broadcasts by comparison to ground surveillance data
  - Multilink Gateway: ADS-B Rebroadcast across different links

TIS-B MASPS Contents

- **System Description**

- **System Level Requirements**

- **Subsystem Requirements**
  - **Ground Surveillance Processing**
  - **Distribution Processing**
  - **Ground Link-Specific Processing (partially here, supplementing Link MOPS)**
  - *New* - **Airborne Link-Specific Processing (partially here, supplementing Link MOPS)**
  - **Assumptions for Airborne Surveillance Processing**
    - **emphasizes compatibility with ADS-B, ASSAP**

- **Testing**

- *New* - **Appendix on Ground Integrity Processing**

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Some TIS-B Topics of Interest

- **Service Volume**
  - **where users receive a defined service**

- **Traffic Information Volume**
  - **where the traffic picture comes from**
  - **can be same or different from Service Volume**

- **Surveillance Quality**
  - **NAC/NIC/SIL and other parameters specified by WG4 (update rate, false track, etc)**
  - **We plan to improve the guidance for calculation of Integrity**

- **Stand-alone and Network Architectures**
  - **Both are supported**

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Principal Changes Under Development

- **Explicit definition of Target Report contents**
- **Explicit requirement for Airborne processing to extract Target Report contents from unique TIS-B messages**
- **To promote ADS-B compatibility, provide corresponding requirements wherever appropriate for TIS-B**
- **Provide guidance for determining and reporting Integrity of surveillance**

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